AMERICAN ANNALS

OF THE

Deaf and Dumb,

EDITED BY

EDWARD A. FAY,

UNDER THE DIRECTION OF

E. M. GALLAUDET, OF WASHINGTON, E. C. STONE, OF CONNECTICUT, I. L. PEET, OF NEW YORK, W. J. PALMER, OF ONTARIO, AND THOMAS MACINTIRE, OF INDIANA.

Executive Committee.

VOL. XVII, No. 4.

OCTOBER, 1872.

WASHINGTON, D. C.
PRINTED BY GIBSON BROTHERS.

THE AMERICAN ANNALS OF THE DEAF AND DUMB is a quarterly publication, appearing in the months of January, April, July, and October. Each number contains at least sixty-four pages of matter, principally original. The subscription price is one dollar and fifty cents a year, payable in advance. Communications relating to the *Annals* may be addressed to the Editor,

EDWARD A. FAY,
National Deaf-Mute College,
WASHINGTON, D. C.

AMERICAN ANNALS
OF THE
DEAF AND DUMB.
VOL. XVII., NO. 4.

OCTOBER, 1872.

THE COMBINED METHOD OF INSTRUCTION FOR THE DEAF AND DUMB.*

BY O. F. KRUSE, SCHLESWIG, GERMANY.

[ASIDE from the importance of the subject discussed, the following treatise will have a special interest for our readers, from the fact that the writer is himself a deaf-mute,† was educated in an institution for the deaf and dumb, and has been a teacher for more than fifty years. He is the author of several other works relating to the deaf and dumb and education in general, on such subjects as the condition of the deaf and dumb without education, the early home training of deaf-mutes, the deaf-mute as a citizen, common schools, etc., which have gained him some distinction as a writer. This treatise, published three years ago, has given rise to much discussion among the German teachers. It has been translated into French ‡ by the instruc-

* Translated from the German. The full title of the pamphlet in the original is "Zur Vermittelung der Extreme in der sogenannten deutschen und französischen Taubstummen-Unterrichts-Methode. Ein Versuch zur Vereinigung beider."

† Mr. Kruse always speaks of himself as a deaf-mute. Probably, however, it would be more correct to call him a semi-mute, as he lost his hearing at the age of six years.

‡ "Essai sur la Conciliation des Méthodes, dites Allemande et Française, d'Enseignement des Sourds-Muets." We have had this excellent translation constantly at hand while translating from the German, and desire here to acknowledge our indebtedness to it for the occasional suggestion of words and phrases.

tors of the institution at Handsworth Woodhouse, Sheffield, England, with a valuable introduction by the distinguished Canon de Haerne, which we regret that want of space prevents us from reproducing in the present number of the *Annals.* The author's statement of the views and claims of the French and German methods, respectively, must be acknowledged by the adherents of either side to be remarkably full, clear, and impartial, while his attempt at the reconciliation and combination of the two will meet with warm interest in this country, where, within the past few years, so many earnest efforts have been made to establish a successful "combined method." It will be seen that the plan of combination advocated by Mr. Kruse differs widely from that generally adopted here.—Ed. Annals.]

PREFACE.

In preparing the following treatise, I have been influenced by the belief that the opposition now existing between the German and French methods of instructing the deaf and dumb might, by mutual concessions, be so reconciled as to permit the development of *a single system* of instruction, which should combine the advantages of both. I am well aware that my views will not receive the assent of *all* teachers of the deaf and dumb; but at least I trust I have succeeded in opening to all the advocates of the conflicting methods a fair field, where they can meet, compare views freely, openly, and candidly, and come to an understanding of each other's opinions.

Every one whose eyes are open to the truth, and who does not dread its light, will readily admit to himself and to others that his own work, even though it were the best in the world, has, like all human productions, its defects, weaknesses, and faults, which might be remedied or removed by considering and weighing the contrary opinions and more or less reasonable objections of others. It is quite certain, as will appear from the following investigation, that deaf-mute instruction can by no means dispense with articulation as a lever and support; but on the other hand it is equally certain that, since articulation has proved an insufficient

means of instruction, the sign-language must necessarily come to its assistance. But if it be established by an examination of the facts that articulation and the sign-language are two authorized factors of deaf-mute instruction, though it may be in an unequal degree, truth demands of the French method, which depends exclusively upon the sign-language and writing, that it shall recognize the rights of articulation and incorporate this into its system; while it is an equally proper demand that the German method shall cordially accept the co-operation of the sign-language. The French teachers must conquer the old, long-cherished prejudice which has led them to claim that articulation is not an essential part of deaf-mute instruction; and the Germans must abandon their exaggerated, narrow-minded, and unreasonable fear that the sign-language will endanger the real interests of articulation. Each side must be convinced that by the combination of these two factors of instruction, provided they are placed in the right relation to each other, a single rational system of teaching may be developed.

The author has especially endeavored to elucidate and correct the prevailing obscure and erroneous opinions upon the nature and essence of the sign-language, by which so many teachers of the deaf and dumb have always been betrayed into an under-estimation and depreciation of this means of instruction, feeling that he is called and impelled to this task by the fact that he himself is a deaf-mute who has been educated in an institution for the deaf and dumb; and it would afford him the greatest pleasure if he should succeed merely in giving an impulse to the restoration of this despised instrument, which seems to him an essential auxiliary to the instruction of the deaf and dumb, to its old place of honor. To prove the importance of articulation, the author believes that he may appeal even more to *a posteriori* than to *a priori* reasoning.

If any voice still has a claim to be heard in the discussion of the question at issue it is surely that of a deaf-mute teacher of deaf-mutes, who has this advantage over others, that he can appeal to the facts of his own experience.

Of course, the author does not suppose that his treatise has solved the important question of the day which is its subject; but he desires to add some fuel to the fire of discussion, trusting that the longer the metal of deaf-mute instruction is tried in its flames the more refined and purified it will become. This is his confident hope; it will also be his consolation, if his good intentions are called in question, and even if he is exposed to a yet more violent personal attack.

INTRODUCTION.

Which is right: the German or the French method? This is the tormenting, dividing question that for a long series of years has stirred the minds and hearts of instructors of the deaf and dumb everywhere. There are probably few teachers who, in the presence of these opposite views of the theory of instruction, which ever become more and more important, have not been forced to doubt whether they themselves were upon the right path, and who have not realized how much this doubt, from which it is so difficult to escape, paralyzes every effort of enthusiasm and of the most active zeal. The matter is no longer one of mere amateur interest for us, the teachers of the deaf and dumb. It is a question with which we must endeavor to deal more earnestly than ever. The desire of some of the leading members of our profession, now more plainly manifested than ever before, for the removal of the sharp points of difference, and for reconciliation with those opposed to us, who are yet laboring in one and the same work and for the same end, is a guaranty to us that, in offering a word of advice to our worthy colleagues, we shall not be as the voice of one crying in the wilderness; and we cherish this hope the more confidently since, instead of resting upon the laurels of our masters and teachers, or relying upon the authority of any other men, however great, we shall endeavor to examine the important subject of deaf-mute education with our own eyes, freely and candidly. It is not necessary that

a teacher of the deaf and dumb should offer an apology for publishing his views; on the contrary, it ought to be regarded as the sacred duty of every one engaged in the work, who believes that he can contribute anything to the solution of this problem, to express his opinions, whatever they may be, whether of assent or dissent, openly and unreservedly, without regard to favor or disfavor upon the right hand or the left, from above or below, in order to promote, to the extent of his ability, the desired and necessary elucidation of the matter at issue.

It surely is not a favorable augury for the art of deaf-mute instruction that to reach one and the same end we choose two divergent paths; that in fact we take two directions, which, since they are diametrically opposed, must necessarily exclude each other; which, though they have each had much success, can both be proved to have failed of success. Alas! of what avail is the most honest endeavor; what can pains and labor and effort accomplish, when we and all the world know that we are still at strife among ourselves; that we are not yet in possession of the jewel of truth, though we have sought and striven for this treasure with body and soul? None of us can avoid the confession that in the war of our preconceived opinions and views we ourselves increase the difficulty of the task which is already so difficult in itself.

Indeed, whether we teach according to the German or the French system, in each there is much that is true and much that is false. At least, it cannot be denied that these two creations of the human mind have their weaknesses, imperfections, faults, and palpable defects, which might perhaps be remedied by the interchange of their methods. Let us honestly confess wherein we have erred and failed, and frankly and openly, without selfishness or jealousy, look our opponents in the face. It may be that we shall learn much from them; in their field we may find many grains of truth worthy to be planted in our own. Let us examine our own method without prejudice, and let us hold fast that which is good, from whatever source it may come.

Since, with our widely-varying methods, we arrive at results so similar, it is quite certain that we are not so far apart from each other as we like to believe; that in all our doing and suffering we stand upon the same ground, and therefore might the more readily come to an understanding of each other. It is, in fact, only the *outward forms* that distinguish our methods and divide us, not the *essence* of the system. Now, if we agree in the essentials, the true and genuine forms will soon be found by an honest search. The German method insists that the essence of deaf-mute instruction is chiefly reached through *articulation;* the French method, on the contrary, that it is best reached through *signs* and *written language.* One of these theories has as much claim to intrinsic value as the other. Since, then, these two forms have sprung directly from the root of the tree and have thriven apart, we should regard them as equally authorized forms, and not as opposite poles, which must interfere with each other. Whoever, therefore, disregards or wholly ignores either of these necessary members of the body of instruction does an injury to the organism, and inevitably imposes limits upon its free and natural growth. True, Germans and Frenchmen may boast of their respective systems that, notwithstanding the difference between them, they have produced happy results; but who will venture to say that, if both the factors of instruction had been regarded, a yet richer and more abundant harvest would not have been reaped? Who will venture to say that the deaf-mute would not have had a broader education, and not only his intellectual but his spiritual nature have been more fully developed? Certainly none of us can deny that our own method (the German) lacks power in just the degree in which we reject the other factor of instruction—the sign-language. The French method, since natural signs are insufficient, lays hold of artificial signs, which are injurious; an error into which it would not have fallen if it had made use of articulation. The German school, on the other hand, would not have been guilty of pressing its theory to such an excessive degree, which alone has been enough to bring

it into discredit, if it had had a fuller and juster appreciation of the advantages offered by the sign-language. Let us not suppose that a perfect, living tree can spring out of the barren soil of arbitrary, unnatural forms; let us rather keep ourselves in entire submission to the realities enjoined by nature, and not allow ourselves to be so carried away by presumption as to deny or reject either of these equally authorized forms.

---

1. *What are the forms or realities which distinguish the French and German methods of instruction?*

The very first attempts to teach the deaf and dumb were characterized by a tendency to different methods, which, however, were not very clearly defined. It was only when the art was farther developed, and reduced to more scientific principles, that one method began to predominate over the other, and to become the prevailing rule of instruction. In this connection, two men in particular created an epoch in the history of deaf-mute instruction: the French Abbé de l'Epée, (born Nov. 25, 1712, at Versailles; died Dec. 23, 1789, at Paris,) and the German, Samuel Heinicke, (born April 10, 1729; died 1790.) The Abbé de l'Epée gave prominence to the language of signs in the instruction of deaf-mutes, regarding this language as an innate reality to their minds, from which the development of their intellectual life must proceed, and upon which their instruction must necessarily be based. Heinicke, on the contrary, maintained that, though signs might be the form in which the conceptions and thoughts of deaf-mutes naturally clothed themselves, yet such persons were none the less inclined to think in the forms of our language, that is, of articulate speech; and that the deaf-mute could succeed in learning to think in words—the chief end of his instruction—by being taught to speak, but not by means of gesticulation. While, then, De l'Epée regarded the *sign-language* as the basis of instruction, Heinicke claimed the greater intrinsic and more substantial value for the method of *articulation*.

To these two systems of teaching, more or less developed, all the schools for the deaf and dumb which afterwards arose joined themselves, and were divided, according as they enlisted under the banner of the French or German leader, into the French and German schools. The French method, though at first more favorably received and widely extended, seems to be gradually losing ground, while articulation, on account of its more salutary influence upon the intellectual being, excites more and more attention, even among the most orthodox of the French teachers, and in some places has already received favorable consideration. But unfortunately the course of many French teachers shows us that they have not yet arrived at a perfect insight into the essence of the articulation method, since, from their great affection for their own child, they make the adopted child of articulation subordinate to it. We feel impelled to warn our colleagues on the other side of the Rhine most earnestly against any such combination of the two systems as this. Such half-way work can benefit neither the instruction nor the pupil. We entreat them to guard against it, since, in this way, they are in danger of being betrayed into a false, mistaken estimate of the intrinsic value of the German method. One should either accept the guidance of the German method, with all its consequences, or reject it entirely; any third course is injurious. But if our colleagues across the Rhine have almost always returned from their attempts at articulation with a very unfavorable opinion, and if they sometimes make a wrong use of articulation, it is partly our fault, since our own ideas show a lack of clearness and precision, and we always press them too far in the hope of being able to allay the not unreasonable hesitation of our opponents. When the united efforts of the adherents of articulation shall have succeeded in purifying the real gold discovered from the dross of the excrescences and excesses clinging to it, at which our adversaries very properly take offence, we may hope that the German method will at last make its way everywhere.

While in former times only single isolated deaf-mutes

received education, the Abbé de l'Epée and Samuel Heinicke established permanent institutions expressly for the instruction of the deaf and dumb: the former at Paris, in the year 1755; the latter at Leipsic, in 1777, having previously been engaged in the instruction of deaf-mutes in various places. By the establishment of these institutions, the two men had the best possible opportunity for observing in every relation and direction the intellectual being, life, and action of deaf-mutes, of studying the mysterious inward nature of such persons, and, finally, of building, upon the psychological knowledge which they gained, systems and principles of instruction. But while the genius of the Abbé de l'Epée was more occupied in studying the peculiar characteristics of the deaf-mute, and in devising peculiar methods in accordance therewith for arousing, developing, and educating the intellectual power, the practical mind of the German, who was less a philosopher than a skilful teacher, regarded the deaf-mute as occupying a position midway between that of a person endowed with all his faculties and one deprived of hearing, and believed that he could be taught, if not strictly and absolutely, at least approximately, according to the general principles of instruction.

De l'Epée's creation, then, is to a certain extent an *idealism*, and the German Heinicke's a *realism*. So the works of the two men have each their excellence, but also the defects of one-sidedness. The deaf-mute is as little an absolute realist as an absolute idealist; his peculiar nature can no more be denied than his common human nature. Perhaps the empirical efforts of the present day will succeed in striking the golden mean between the ideal and the real. The two conceptions are only different views of the same thing, according as it is looked at from one side or the other. In science, as in art, there is neither an absolute idealism nor an absolute realism.

The two men agreed in this: that the education of the deaf-mute must depend upon the formation of language; that only in the language of words could he receive, assimilate, and make his own the knowledge to be imparted to

him, and, in general, all kinds of representations, conceptions, and ideas. Therefore, they both made it their chief aim to discover how they should impart this language to the deaf-mute. But easy as this purpose might be to form, it was very difficult to realize. How was a deaf-mute ever to be initiated into the forms of thought which existed for the hearing person, but not for him? How was he ever to form a thought by means of signs which were not the signs of his intellectual conception? Was it at all in his power to think in audible signs, when nature had provided that he should express his ideas in visible forms—in gestures?

Well, said the Abbé de l'Epée, let the poor deaf child speak in his own way; let him express himself in gestures! If he has forms at hand in which he expresses his ideas, by means of these forms he can learn to appreciate those other forms which also express ideas, though in a different manner. Must not the deaf-mute, who naturally thinks in signs, be able to think in any kind of signs, and so also in those of our language? Since words represent something to him through gestures, can he not also make words the signs of his ideas? Yes; if the words signify the same thing that the gestures express, they must at least appear to him as the representatives of the gestures, and be recognized by him as signs standing for ideas. Thus, thought De l'Epée, can the deaf-mute, by a simple interchange of the two signs, however heterogeneous they may be, learn to write and to read.

Oh, no! answered Heinicke, No! Let the deaf child also learn to speak, to articulate! Even granting that it is not altogether natural to the deaf-mute to think and express his thoughts in articulate sounds, yet it must be that he has the capacity and disposition to fix his ideas and conceptions in words, which are the most usual forms of human thought. Develop this hidden capacity or faculty; kindle this little spark; teach the deaf-mute from the beginning to connect his ideas directly with the spoken signs, and follow this method consistently; thus is the path to thinking in words already broken. Even supposing that the deaf-mute found

no difficulty in the artificial or conventional signs of the language of gestures devised by De l'Epée, my pupil would sooner and more easily be satisfied with spoken words for the expression of thought.

Though little objection may be made to either of the views of the two men thus presented, yet they must both, Heinicke as well as De l'Epée, be charged with mischievous error in the application and development of their fundamental principles. It is yet a question whether the means recommended by De l'Epée—the sign-language, whose first duty it is to introduce the deaf-mute into the sphere of our language—really succeeds in entirely fulfilling its high mission. It is possible that the defects of the natural language of gestures may be made good by the addition of methodical signs; but these acquired forms do not contribute in the least to the creation and assimilation of thought, as words do. The sign-language, even though it rises to the level of the signs of word-language, cannot renounce or get rid of its plastic form without destroying itself; consequently it does not admit of abstract thought, and so fulfils the aim of language only in a limited degree. Its great value is not to be denied; but with these defects can the teacher feel satisfied with it? Must he not seek after other means by which abstract thought may be promoted, and the gate of language opened wide?

But as regards the use of articulation as a means of instruction, it may be asked whether this, although it may exert an influence upon thought, can exercise that influence without the co-operation and intervention of the sign-language; for it must be affirmed most positively that a congenital deaf-mute cannot learn to think, speak, and write upon the basis of articulation only. Heinicke, like De l'Epée, goes too far, when he maintains that the deaf-mute, through simultaneous and continued presentation of ideas and conceptions in spoken words, can be made master of them. Will that which system cannot accomplish be obtained through mere practice? Assuredly not.

If De l'Epée, as is evident, regarded the deaf-mute too

much as a deaf-mute to be able to claim for his pupils the general principles of the development of language among men; if he denied to the deaf-mute the power of speech as absolutely as that of hearing, Heinicke fell into the directly opposite error of overlooking the deaf-mute's peculiarities, and thus wholly ignoring the realities of his nature, which necessarily limit him in the acquisition of spoken language.

It is certain that the two methods, articulation and the sign-language, are equally authorized elements of instruction; but the relation of each to the other and to the course of instruction must be more closely defined. This topic will be discussed in future chapters.

---

2. *What are the principles of the French and German methods, respectively?*

The French method proceeds upon the following principles:

1. While hearing persons speak by means of the vocal organs, deaf-mutes speak by gestures and facial expressions. For the former, articulate speech is the basis of the creation of language; for the latter, signs are the ground and foundation upon which the teacher is able to impart language to them. Ideas of every sort in the deaf-mute's mind take the form of signs; so it is only by means of the sign-language that the instructor can convey to him what he has to learn.

2. As the hearing child learns language only through the language which he already has, and which he has created for himself, so must the deaf-mute's own language, the sign-language, be his only master to teach him language.

3. At all events, the deaf-mute can learn language, which for him is a foreign and heterogeneous thing, only by the way of analogy and induction. The sign-language, then, is the key which opens to him the gate of language.

4. Though it be true that spoken language is best adapted to fix ideas represented by words, yet it does not follow that it is the universal and absolute form of thought. For those who can hear it may always be a convenient medium

of thought; but it is not the same for those who cannot hear and speak.

5. For those who cannot hear, who have their hearing, as it were, in the eye, nature demands other and visible forms for the expression of thought. This demand is met by the sign-language, which places the deaf-mute in easy communication with his teacher.

6. If the natural language of signs, which the pupil brings with him to school, be developed and perfected, so as to provide signs for all kinds of conceptions and their combinations and relations, (such as are afforded by word-language,) the deaf-mute can think in the sign-language thus formed as well as we do in words. (? ? ?)

7. As this methodically-formed sign-language renders the same service as words, there is no necessity for the deaf-mute to learn articulation, which is far from performing the same office for him that it does for the hearing person.

8. In any case, we must believe that the relation between thought and speech, destroyed by the lack of hearing, can be restored only by the intervention of the sign-language. Every one must acknowledge that the German method, by means of articulation alone, can accomplish very little. Nothing can be truer and more certain than that *no* deaf-mute can learn to think, speak, and write without a language of signs.

9. We must reject as unproved and unreasonable the assertion that no man can think without words, since man can often make his thoughts known in pictures, or in movements of the face, hands, etc., which correspond in a certain degree to pictures. Now, if a simple painting can call up images in the mind, the much finer and sharper pencil of the sign-language must be able to represent the most subtile and sublime conceptions and the most abstract ideas. By the living and powerful expression of pantomime a whole world of thought is conveyed to the deaf-mute, of which the hearing person could scarcely form an idea. So pantomime in many circumstances displays great eloquence, and is far

more powerful than words wherever an impression is to be made upon the heart, feeling, and disposition.

10. But for abstract thought we have not only the methodical language of signs; we claim writing also for that purpose. Whatever the sign-language lacks in this direction is supplied by writing. In the form of writing, words impress and fix themselves upon the minds of our pupils, and thus—provided the soil has previously been well cultivated and prepared for the comprehension of language, by means of the sign-language—they become the vehicles of thought. As to whether writing or articulation exerts the greater influence upon thought, there need be no controversy between us and our opponents; for it can be psychologically proved that spoken words have no more connection with ideas than written words.

11. For deaf-mutes, moreover, writing and articulation are both alike dead forms, to which they can and must adapt themselves, when they have acquired a certain command of words. If our method succeeds in inspiring in our pupils an irresistible impulse to fix their thoughts in words, we may expect that with words they will master writing. It is no wonder, then, that our pupils generally have a strong inclination to think and speak with their fingers, or to write in the air, (dactylology.) Articulation, like writing, offers an indigestible food which only hunger can digest. As means of instruction the two stand upon the same footing, since they are alike instruments which the pupil uses only under the pressure of necessity.

12. What is the reason that our opponents have such an aversion for the manual alphabet? Do not pupils read more rapidly, easily, and correctly from the motions of the fingers than from the lips? Is it not a great waste of time, when the teacher is compelled to speak slowly and distinctly, and then to repeat again and again what he has said, in case the pupil is not skilful in lip-reading?

The leading principles of the German school are:

1. Articulation is inseparable from the acquisition of the language of words as such; it is the hidden, only, and true

bond which unites the word and the thought. Necessity, then, imperatively demands that the deaf and dumb shall learn to speak, notwithstanding their want of hearing.

2. The only hindrance which the want of hearing imposes upon the deaf-mute is, that he has never been able to form any conception of sound or tone. But this is something with which he can easily dispense, since such a conception or consciousness is by no means essential to learning the word. (?!) This conception or consciousness of the relation of the sound to the word is not the only and absolute cause that the idea and the word, or thought and speech, are united within us, forming one organic vital activity of the soul. This intellectual act of the soul rather results from the simultaneous connection of ideas of things and formations of sound, (spoken words.) If the deaf-mute, then, be taught from the first invariably to connect the intellectual forms or ideas directly with the signs of sound, (words,) he will complete for himself the act of joining the idea and the word, and will bring the sign and the thing signified into unity of consciousness; and from the moment he learns to express his ideas in spoken words only, his thought will withdraw from the language of signs and grow into the language of words. Spoken words, moreover, since they designate and fix ideas in the mind of the deaf-mute, afford a medium for his thought not less valid than signs.

3. But the apparently dead form of sound is not really a dead form for the deaf-mute. Though he does not hear speech from without, yet if he has been instructed in speaking, he perceives very distinctly the formations of sound produced by himself; it may be said, that he hears inwardly. This phenomenon renders it easily comprehensible that it is much easier for the deaf and dumb to think in words by means of articulation than by means of writing or the manual alphabet.

4. If the French school really has reason to be proud of its approved method of incorporating words into the mind, that is, its hand or finger alphabet, we may with equal or

even greater justice point to our mouth alphabet, which deaf-mutes form for themselves by reading speech from the lips of others; while we also claim that stronger impressions are produced upon the pupil by the efforts made in producing sound than by the stiff and inexpressive motions of the fingers; that the physiognomy of words can be more quickly and readily developed from the motions of the lips than of the fingers, and that the words will thus take a firmer hold upon the mind.

5. If the deaf-mute is really to learn to think directly in words, the act of uniting the idea and the spoken word must be performed without the intervention of signs, which degrade the word and make it a vassal of pantomime. (? ?)

6. That the sign-language is a necessary bond of union between the idea and the word we most emphatically deny. The course of instruction would never have needed the sign-language if it had not been arbitrarily introduced—if the injudicious and detrimental intermingling of pantomime had been guarded against.

7. The articulate designation should be attached directly to things, objects, activities, and qualities of things. We should show what the word or words mean by real objects, pictures, or actions, and not by gestures. If we thus give the pupil no other signs than the spoken word, he will know no other way of expressing himself and thinking—that is, of fixing ideas—than by the signs which he has received from the beginning of his education.

8. For us the sign-language has no other value than that it may contribute its part toward rendering conceptions and ideas clear and perceptible. In any case, it serves only as a preliminary means of mutual understanding between teacher and pupil.

9. If it is to be granted that the deaf-mute can make writing a medium of thought, much greater importance is to be attached to the similar claim of articulation, which has the advantage over writing in every respect.

10. Moreover, that the deaf-mute may be led to the expression of his thoughts in writing, he must learn to speak;

for writing is a representative of speech, and only on the presupposition of speech can it be a representative and vehicle of thought. It is, therefore, an unjustifiable and unnatural proceeding to teach children to write and to read without the aid of articulation.

---

3. *Is articulation really adapted to take the place of the sign-language in the instruction of the deaf and dumb?*

The German school, in opposition to the French, emphatically denies that the instruction of the deaf and dumb has need of the sign-language in addition to articulation. On the contrary, it maintains that, if the deaf-mute be taught to express himself by spoken words instead of gestures, he will know how to think in these signs; that is, in spoken words, like other men.

This is a very vague, untenable, and unfortunate assertion, which it would be difficult to prove either *a priori* or *a posteriori*.

Indeed, no other reason can be adduced for the assertion than that the deaf-mute, however far he may have the faculty of thinking in signs as such, must, nevertheless, be inclined by nature to think in the signs of our language, that is, the language of words, though he may have no consciousness of sound, upon which the word-signs are chiefly founded. But such reasoning as this, at least if the proposition is taken in a general sense, properly arouses the opposition of all able men who have the opportunity of looking more deeply into the nature of the case. It hardly can stand before the tribunal of psychological science.

It is true that the human soul cannot think without signs. It is also true that it has the ability to create signs for itself, and that in these only can it think. It is no less true that it can recognize signs of any kind whatever as such; that is, as symbols of ideas, and adapt and use them accordingly. But it is a great error to draw from these facts the conclusion that the soul also has the power to take signs of all kinds, audible and visible, into the immediate service of

thought. To recognize or perceive signs is not necessarily to assimilate them, to make them one's own. The essential element of assimilation is that the soul shall not only recognize the signs as such, but shall also know *how far* they are symbols of the conceptions. Indeed, the idea received from the signs is not purely spiritual; it is rather a mixed idea, rational and empirical. Not only the thinking mind, but the bodily organism also, with which it is closely connected, has its share in the idea. The soul does not create signs directly and independently, but by the intervention of outward perception—perception of the things which act upon the bodily organism. The soul chooses and accepts signs for itself in accordance with the influence of things upon the bodily organism, and it can think only in such signs as are thus received through its own perception, or *a posteriori*. The things which the signs designate must make themselves known to the soul through the signs, if it is not merely to perceive these, but also to receive them into itself. So, according to the different relations of their bodily organism, things make themselves known to hearing persons through their audible phenomena, but to deaf-mutes through their visible phenomena; consequently, the hearing form their signs of perception and thought from the elements of the sounds of things—the deaf from the elements of their figures, forms, and motions; thus the former use *words* and the latter *gestures*.

It is pretty well established, then, that speech and thought do not, as is commonly supposed, stand together in such close organic relation that the one must necessarily produce the other; the necessity is rather that the signs in which one speaks shall have an inward meaning for the soul. The sign in which the soul is to think must not only designate—it must also represent; that is, it must have the idea of the objective. For the deaf and dumb, gesture-signs have objectiveness, while word-signs have not. At least, the deaf and dumb have no natural aptitude of perception for the signs of our language, and consequently they cannot think directly in such signs, like hearing persons. Word-signs

have for them the slight interest of designation—not the interest of representation; they have consequently no absolute meaning, but only the limited meaning of the deaf-mute's own signs—gesture-signs. The use which the deaf and dumb make of word-signs is therefore secondary—outward rather than inward. They do not conceive of word-signs as direct signs of the thought or idea, but as signs of their signs, in which alone they think. So they generally regard word-signs, before these become to them direct vehicles of thought, as signs of gesture-signs.

But let it not be objected that it is unnecessary that the word present itself to the deaf-mute first, or have for him something objective, because in general it represents nothing to hearing persons. Granted that the word in general represents or portrays nothing in and of itself; granted that, with a few exceptions, (onomatopes,) it is only a conventional sign; it is not necessary that the word shall represent to the soul precisely the object which it designates, but only that it shall have something objective for the soul—that it shall recall something which has already been perceived.

As the deaf-mute can conceive ideas only in a visible form, so the hearing person cannot conceive them in other than an audible form, whether the audible forms of the words represent anything or not. When the child learns to speak, he does not imitate unconsciously, or with the mere consciousness that the words are fixed signs of ideas; but with the full consciousness that they express, if not precisely the object or the image, yet an object of his sentient perception. Who, then, will say that the child, before he begins to speak, has not already prepared himself for it in silence? Before he speaks he must think for himself—that is, inform himself concerning what surrounds him; and to this end must necessarily create signs, by means of which he may distinguish things from one another and fix his ideas. From what other source does the hearing child draw the signs by which he distinguishes things than from their sounds, which are the first characteristic tokens that impress his mind? Thus

the bleating of sheep, the mewing of cats, the barking of dogs, the lowing of cattle, the grunting of swine, etc., give him the names for objects when he can only lisp, and cannot yet speak. Though all children do not anticipate us with names, yet in thought all have spoken with the things about them; have bleated with the sheep and mewed with the cat; have bestowed names of which we have no suspicion upon almost every object of their surroundings. These names which the child gives to things, however strange or paradoxical they may sound, are the beginning, the roots and elements, of his language. The new words which he now learns are only his own names christened. No child learns to speak who has not previously talked to himself. The formation of language must have begun before the acquisition of language can proceed. If the child ever learns to speak, he learns the word as the abstraction of his own concrete designation, and at the same time the image or portrait of the word, which he no longer needs to use, becomes effaced.*

Among all the influences of outward things upon men of perfect organization, is it not audible phenomena that make the strongest, most sensible, and most permanent impression? When the visible characteristics of things are yet silent, or at least betray themselves merely through their movements; when, moreover, forms, figures, conditions, actions, etc., can be imitated only with great difficulty, as is proved to us by the slow, painful, and uncertain course of the sign-language of the deaf and dumb, then the audible characteristics of things speak all the louder, and, as it were, put their names into our mouths. Herder, in his treatise on the origin of language,† crowned by the Berlin Academy, says:

---

* Herodotus relates that Psammeticus, king of Egypt, caused two children, at the time of their birth, to be taken by a shepherd to a secluded place, and commanded that they should not see or hear any living creature except a she-goat, whose milk was to nourish them. After an interval of two years, during which the king's orders had been strictly observed, the shepherd, to his surprise, heard from the children the greeting, "Bec," "Bec."

† "Ueber den Ursprung der Sprache." Berlin, 1789.

"What are the first elements of language? *Sounds!* As to sight, how slowly it develops itself; with what difficulty the soul arrives at ideas of space, form, and color! Sight is not the sense best adapted to language. Besides, its phenomena are so cold and dumb; the impressions of the coarser senses are so indistinct and confused, that the ear, if anything, naturally becomes the first teacher of language. Take, for example, the sheep. As an image, it moves before the eye with all objects, forms, and colors upon one great panorama of nature; how much is in it, and this how difficult to distinguish! All characteristics mingle confusedly together; all therefore are inexpressible. Who can utter forms? Who can give sound to colors? Man lays his hand upon the sheep and feels of it. The sense of touch is surer and fuller, but its characteristics are too full, too bewildering. Who can tell what it is that he touches? But hark! the sheep bleats! Then a distinguishing characteristic detaches itself from the canvas of the painted picture; it is distinctly perceived, and it penetrates deep into the soul. 'Ah,' says the child, 'now I shall know you again. You bleat!' The dove cooes, the dog barks; there are three distinct ideas and three words; the former he endeavors to introduce into his logic, the latter into his vocabulary. So through the sense of hearing nature comes to meet the child half way. She not merely sounds forth the characteristic in his presence, she forces it deep into his soul. There is a sound; the soul apprehends it; then it has a word. For the child the tree is the rustler, the wind the sigher, the fountain the murmurer. There lies ready in his soul a little dictionary, awaiting the impress of the organs of speech. But there are some objects which do not make any sound. Where shall we find characteristic words for such? What have color and roundness in common with their names, so that these shall proceed from them as naturally as the word *bleat* does from the sheep? What connection is there between sight and hearing, between color, scent, and sound? Man comes into the world; by what an ocean is he at once encompassed! With what difficulty does he learn to distinguish, to recognize the senses; to use them when once recognized! Sight is the coldest sense, and had it always been as cold, distant, and distinct as it has become for us through the labor and use of many years, I certainly do not see how one could have made audible what he saw. But nature has taken care of that, and has made the way shorter, for sight itself is only touch at first, as children bear witness. Most visible things move; many sound in moving; and where they do not they lie, as it were, nearer to the eye in its primitive condition, and so may be felt of. The sense of touch is allied to that of hearing; its designations, as hard, rough, soft, woolly, velvety, hairy, smooth, sleek, bristly, etc., which have reference only to surfaces, all sound as if one were feeling of the objects. The soul, invaded by such a throng of mingled experiences, feeling the need of creating a word, grasps at and

perhaps obtains the word of an allied sense, whose feeling corresponds with this; so sensations all become words, even for the coldest sense. The lightning does not sound; how shall it be expressed—this midnight messenger, 'which suddenly unveils heaven and earth, and ere a man can say, Behold it! has already vanished into the abyss of darkness?' Naturally a word arises, which, by the aid of a certain sympathy, gives the sensation of suddenness and swiftness that the eye felt—*lightning!* (German, *Blitz!*) The words scent, tone, sweet, bitter, sour, etc., all sound as if they came from the sense of touch; for are not all the senses originally touch? If we feel in the word dawn (German, *Morgenröthe*) some idea of beauty, splendor, and freshness, the traveller in the East feels in the root of this word the first rapid, joyous ray of light, which we perhaps have never seen; at least, have never felt with the spirit."

Now, what teacher of the deaf and dumb can seriously maintain that the deaf-mute may be brought by means of articulation—that is, by being taught to express imparted ideas in spoken words—into the condition of hearing children, so as to think in words? Is it to be expected that the deaf-mute will be able to think in forms which for hearing persons have an inward meaning, but for him have not? It is impossible. The radical error of this paradoxical claim lies in the mistaken presumption that speech and thought do not always need the connecting link of hearing, or in the erroneous idea that there is no difference between expressing thought in words and thinking in words—things which, instead of being identical, are wholly heterogeneous. What teacher of the deaf and dumb would undertake to prove *a posteriori* that his pupil, from the moment when he learns to express his thoughts in spoken words, also thinks in words, apart from gestures? Such a wonderful being I have not yet seen; such a prodigy I should certainly like to see. If the deaf-mute really thought in the forms of our language, as is claimed, he would immediately be restored to the condition of language of the hearing child; he would be able to speak, waking and dreaming; he would meditate only in articulate forms; he would speak, read, and write only by thinking in articulate forms; moreover, provided he could grasp words directly in the form of articulation, he would already be in the way of securing that more

rapid and surer progress in the acquisition of language which belongs to the hearing child. But what does our daily experience prove? What is every teacher of the deaf-mute taught by his own practice? Unfortunately, the opposite of all that. How the poor creature writhes and twists upon the field of speech before he is able to stand securely and walk steadily! With what pains must the noble food offered his spirit, hungering for language, first be artificially prepared in a peculiar manner, and language be taught him by a peculiar method! And why is all this so? For no other reason than because the pupil, with all his wonderful ability of expressing himself in words, is still very far from thinking for himself in the same form.

We must, then, most earnestly protest against the claim made by the orthodox, or rather by the bigoted, advocates of the German method—for we think its reasonable adherents would rather agree with us—the claim that articulation affords a sufficient and complete means of teaching language to deaf and dumb children.

---

4. *What means have we within our reach that for the deaf and dumb shall perform the same office, in some degree, that spoken language does for hearing children?*

If the word recommends itself of its own accord, so to speak, to the hearing child, because he naturally thinks in articulating forms, for the deaf-mute child it must be placed in a similar relation to his actual mode of conception and thought. Now, the deaf-mute child thinks only in the language of gestures. For the hearing child it is articulation that is the medium of thought; for the deaf-mute it is gestures. For the former, the word becomes the vehicle of thought through spoken language; for the latter, through the sign-language. Only by thinking in gestures does the deaf-mute learn to speak, (read and write,) as it is only by means of articulation that the hearing child learns to speak, read, and write. But articulation has this advantage over the sign-language, that it makes the word the direct expres-

sion of the thought; while the sign-language causes the deaf-mute to conceive of the word rather as the sign of the gesture-sign. Indeed, the deaf-mute is compelled by his peculiar circumstances to conceive of the word as the sign of his gesture before it can become for him a direct sign of the idea, just as the hearing child can conceive of the word only as the sign of his vocal language. For the deaf-mute, therefore, the sign-language must take the place of spoken language; it is the surrogate of spoken language in the strict sense of the word. If it does not perform all the office that spoken language does for the hearing child, yet it accomplishes that which is most essential and important—it enables the child to learn to know the word as the form for the expression of thought. It is the first thing that opens to the deaf-mute the gate of language. If it did no more than this, it would still have rendered a great service.

We see everywhere that the deaf-mute cannot form or develop the least thought in words without having recourse to the sign-language; that even when he knows how to speak or write, he still continually thinks in gestures. If the teacher observes nothing at all of this, he must be totally blind; for the pupil must make gestures in his mind or with his feet, if he is not allowed to do so with his hands. Though the teacher faithfully communicates with the pupil only in spoken words and not in gestures, yet the latter will adapt his own signs, of which he has a thousand at his command, to the words, in order to be able to think; that is, to represent to himself the things that are spoken of. Hearing persons proceed in the same way. When they speak, read, or write, they carry on a colloquy with themselves in the mind, either aloud or silently. The deaf-mute cannot form the least word without the intervention of signs, just as the hearing person cannot without the aid of articulate forms. Nature, then, commands us to allow the deaf-mute his signs, so long as he does not think in words, just as a skilful teacher permits his hearing pupils who have not yet acquired much knowledge of the abstract meaning of words to speak and think in their own way. Moreover, how *can*

we banish the deaf-mute's own language when he is learning words, since in that lies the only possibility of his thinking at the same time? It would be doing violence to nature if the intervention of signs were nowhere allowed; it would be demanding an impossibility of the pupil if he were required to speak upon the basis of articulation only; it would be prescribing to nature laws of development which she would not obey; and if, notwithstanding this, human art by some miracle should succeed in producing results, a prudent man could not but regard a development of this kind as a hot-house education, and he would warn us most earnestly against it, as likely to interfere with the real intellectual advantage of the poor children.

We agree, then, with all the moderate, reasonable adherents of the German method, as well as the representatives of the French method, that the sign-language must be made the basis of deaf-mute instruction, just as spoken language is the basis of the development of language for hearing children.

---

5. *Has the sign-language only the limited value of articulation, or does its influence in respect to the acquisition of language extend still farther?*

The value of the sign-language consists not only in the fact that by means of it the deaf-mute pupil learns to comprehend and use the word as the sign of the idea, or as a form of the expression of thought, but also in introducing him into a knowledge of the interior constitution of language. It stands midway between the sign and the thing signified, or between the word and the thought, and makes known to the pupil what is meant by this or that expression of language. But while it discloses to him the actual relation between speech and thought, it also gives him a more or less clear idea of the fundamental principles of language. If the deaf-mute thinks rightly when relying upon the sure testimony of gestures; if he knows how to form ideas, judgments, and conclusions which shall be logically

correct, it is not easy to see why he cannot and must not derive therefrom the abstract forms of language. So the sign-language, since it discloses to the pupil the relation of thought that lies at the basis of language, is a reflector, in which he can behold for himself and learn to comprehend the phenomena of language. It is true that the form of the sign-language is quite different from that of word-language, as the former renders thoughts only in a concrete form, or in pictures, and not in an abstract form; but it is the only means by which an understanding of language can be imparted, since the pupil cannot be reached by mere words until the sign-language has made him in some degree familiar with them. The fact, therefore, that the sign-language is different from word-language, and heterogeneous, is no reason why it should be banished from the course of instruction. The sign-language is not literally translatable, and does not serve in the capacity of a translator, but rather as an indispensable interpreter of the substance of language. It furnishes the thoughts which are prerequisite for the creation or comprehension of words and forms, though it may not render the same service that one language renders to another. Moreover, though the sign-language does not need a name or a sign for every word, every form, and every expression, it is able, when skilfully employed, to untie the hardest knots of language.

As in general the intellectual capacities are cultivated and developed by means of real objects, so the deaf-mute's power of language can be cultivated and developed only by the realities of the language in which he first manifests his intellectual being, and in which he speaks and thinks. As the picture is the basis of the mental image, the intuition of the conception and the concrete of the abstract, so is the sign-language of word-language. The picture cannot be separated from the image nor the thought from its expression without destroying the faculty of speech or language; as little can the sign-language, in which the deaf-mute first thinks and speaks, be taken from him, if he is not to form all his ideas at random.

Whoever, then, rejects or ignores the sign-language as the basis upon which the pupil must first learn our language, rejects at the same time the conditions upon which the development of his power of language must depend, and inevitably falls into the danger of teaching language to the deaf-mute abstractly, and therefore in a manner which is extremely unfruitful, and, I may add, injurious to the mind. As it is the general law of mental development that the unknown shall be joined to the known, the distant to the near, the rational to the empirical; as in general the native language is made the basis for the acquisition of a foreign language, so no more natural method can be devised for the instruction of the deaf-mute in language than that of joining the thread which is to be spun directly to the sign-language. Language, like thought, can be made living, active, and fruitful only through the living breath of the native language. If the education of the deaf and dumb is to develop them for knowledge and power, not mechanically and narrowly, but intellectually and broadly, there can be *no other way of breaking the path of instruction in language than through the sign-language.*

---

6. *Do all the advocates or adherents of the German method really believe that articulation affords a means of instruction so infallible as to make the sign-language wholly superfluous?*

Even among those who maintain with all emphasis and with great tenacity the fundamental principle of the German method—viz., that deaf-mute children should be taught to speak, write, and read only by the way of articulation—there is great diversity of opinions and views as to whether the sign-language should be used in the application of this principle, and if so, how far. While the majority of them meet us with the frank confession, honorable alike to their character and their science, that the German method cannot wholly dispense with the aid and co-operation of the sign-language, we find on the other hand not a small num-

ber of Philistines who expect healthful intellectual development only from an unconditional and absolute adherence to their principle. Let us leave these opponents, who care less for the natural law of development than for the consistency of their method, and who seem devoted to the service of a theory; let us rather hear those men who are capable of taking a broader view of the question.

Dr. Neumann, director of the Königsberg Institution for the Deaf and Dumb, a most intelligent teacher, whose too early death we lament, says in his very instructive paper upon the Paris Institution:*

"No judicious teacher will wish to banish signs from his method of instruction. It is, and must remain, the chief element in which the education of the deaf-mute begins. His world of signs is his intellectual home. In the first years of his instruction our words are still foreign, dead signs for him, which he accepts and uses only because and when necessity compels; as soon as this is removed he prefers to use the language in which he has thought and felt since his consciousness first awoke. But as he receives written signs and sees the circle of his conceptions and ideas widen, he begins to like this new language which brings him so much. The word-signs then become the supporters and vehicles of the new ideas received, or the old ideas enlarged; the deaf-mute begins to think in the language of words. The method of instruction that accomplishes this result is the true one, and this is the touchstone by which every method should be tried."

Heinicke's son-in-law and immediate successor, Dr. Reich, formerly director of the Leipsic Institution, though enthusiastically devoted to the German method, confesses with German frankness:

"Since the mind cannot think without signs, and the signs of language, though the most perfect, are too difficult for the deaf and dumb at the beginning of their education, and not adapted to their manner of thinking nor their unpractised organs of speech, pains should be taken to improve the language of signs; the pupils should be taught to describe in signs whatever they perceive in an object—all kinds of actions, effects, relations, and circumstances."

Dr. Jaeger, well-known and universally esteemed for

* "Die Taubstummenanstalt zu Paris im Jahre 1822," page 27.

his clear and valuable writings upon deaf-mute education, says:

"Upon the sign-language the teacher must build all the future education of the deaf-mute. But though he begins with this, it is his purpose gradually to make it superfluous. [A pithy remark, deserving of attention.] Sound and writing are necessary for the deaf-mute, although for him sound can never really be sound."

Likewise must the words of his successor in office, Dr. Wagner, the present director of the Gmünd Institution, an impartial judge, be believed, when, as president of the Esslingen convention of instructors of the deaf and dumb, he opposed the extravagances and excesses of certain members of the convention:

"The sign-language is indispensable as a means of introducing deaf-mutes into the language of words, and of ascertaining the intellectual power of the pupils when they first enter the institution. I would have the sign-language a substitute for spoken language as long as the pupil is not able to express himself [and I might add, to think] in the latter. As for the claim that in the instruction of the deaf and dumb the pupil's lost sense must first be restored to him, and then he must be taught like a hearing person—that is more easily said than done; it is, and always will be, necessary to follow a peculiar method of instruction, *because the deaf-mute does not hear.*"*

Counsellor Saegert, formerly a teacher of the deaf and dumb, now inspector-general of the Prussian institutions, also advocates the use of the sign-language. Mr. Büscher, in the fourth report of the Cologne Institution, 1838, says:

"He [Mr. Saegert] always insists upon the sparing use of the sign-language, but regards its entire exclusion as impossible. Instruction presupposes a means of mutual understanding between teacher and pupil, and at the beginning of the course this can be found only in gestures. By no other means can the teacher form the often-neglected heart of his pupil, designate good and evil as such, encourage the industrious, stimulate the idle to activity—in short, exercise a moral and intellectual influence upon the deaf-mute. Yet he regards the sign-language merely as a means for solving the chief problem, which is, to

* Organ der Taubstummen und Blinden-Anstalten Deutschlands, von Dr. Matthias, vol. xi, page 122.

communicate word-language to the pupil. [How well this describes the whole course of instruction by the natural method!] The chief office of gestures is to express the ideas and perceptions of which the senses take cognizance; but signs for ideas and perceptions of another kind, especially when an obvious point of resemblance between the object represented and the sign can be found, are not to be wholly excluded, and even conventional signs may have their place. [This shows how the natural language of signs may be improved without overstepping its proper limits.] The development of an artificial sign-language is unnecessary, since the natural sign-language reaches the limits allowed, and would, moreover, have the disadvantage of interfering with the assimilation of word-language. Where the latter can serve as the medium of communication in giving instruction the teacher should neither employ signs nor allow his pupils to employ them, and they should gradually fall into disuse, even as a means of instruction."

The experienced Dr. Gronewald, formerly director of the Cologne Institution, says:

"Pantomime, being the first point of contact and union in the instruction of the deaf-mute, is the only possible way of making him a partaker in the culture of the human race. The deaf and dumb child is naturally directed to pantomime as his native language, and in his whole life cannot, and will not, entirely dispense with it. Our institution does not fall into the delusion of attempting wholly to exclude signs. It gladly takes them into service, since they are indispensable to it. Intellectually dead, a walking statue, would the poor deaf-mute be, and remain, if by any possibility the idea of robbing him of the sign-language could be carried into execution."

Alexander Venus, director of the Imperial Royal Institution of Vienna, expresses himself yet more explicitly and directly:

"The hearing person comprehends through the organ of hearing; through hearing he thinks in sound. Not so the deaf-mute, who lacks the two most important means of culture—hearing and speech. The deaf-mute comprehends through the eye; he cannot possibly think, like the hearing person, in sounds; he thinks in forms, signs, images, and thus there must be formed within him a method of thinking entirely different from that of the hearing person. Spoken language, being inaccessible to the senses of the deaf-mute, is and must remain for him a foreign language. These are facts which no one can dispute. If, then, sounds are the way in which the hearing person, who comprehends through hearing, comes into the possession of language, it follows that for the deaf-mute, who comprehends through the

sight, this must be the medium through which he attains to writing and articulation; and this intellectual bridge is the sign-language."

At the conference of German teachers of the deaf and dumb, held at Esslingen in 1846, the proposition of one of the members of the conference, "to banish the sign-language from the course of instruction," was wholly rejected, on the ground that it had already been demonstrated by the experiments of a certain candidate of theology in Berlin that the pupils thus taught, though they acquired readiness in speech and lip-reading, were without the least comprehension of language, even in simple sentences. It was maintained that, by the suppression of pantomime, the course of instruction was rendered long and difficult, the intellectual development was hindered, the child was shut up within himself, education and culture were limited. In short, violence was done to nature; it was an unnatural, impossible, fruitless proceeding.

If there are still persons who advocate the unconditional and exclusive use of articulation in teaching the deaf and dumb, they must, for the most part, be those who, despite long years of practice, still remain strangers to their pupils. Being unfamiliar with the results of the experience of so many men of the profession, they easily become enamored of the general principles of education; and, carried away by this pedantic delusion, think nothing is easier than to free the art of deaf-mute instruction from forms which they regard as antiquated and outgrown. Examined carefully, all such novelties are seen to be only the remains of the well-meant, but wholly mistaken, efforts of Graser, Stephani, Daniel, Arrowsmith, and others, to make the science of instructing the deaf and dumb the common property of the public schools, and must inevitably, sooner or later, share the fate of those educational devices. Certainly there is still room for meritorious service. The merit of clearing the field of weeds is not less than that of cultivating it; but let us take care not to pull up the grain at the same time with the weeds. No one can blame the effort to simplify

the method of teaching the deaf and dumb, or the attempt to reduce it, as much as possible, to the footing of general instruction. But let us not be angry with the Lord of nature when he says to us, Thus far and no farther! True science stands in close alliance with nature. It is only presumption or childish caprice that will endeavor to break through the barriers prescribed by nature to the course of instruction. By such unworthy trifling the deaf-mute is more likely to be educated into a prodigy than into true manhood.

---

7. *Does the sign-language, as such, deserve to be cultivated or not?*

If it be granted that the sign-language is chosen by nature for the purpose, or, if I may so express myself, has the monopoly, of conducting the deaf-mute into the realm of language, the question whether it deserves to be cultivated must be regarded as superfluous. The better the means by which we seek to reach an end, the better will it perform its task. Must not the sign-language, whose first duty is to develop the thought, knowledge, and power of the pupil, render the better service to instruction, the greater the variety of notions, conceptions, and ideas which it is able to provide? The more intelligibly the teacher speaks to the scholar, the more vividly he is able to express the form of a judgment, an opinion, an idea, a conclusion, a doubt, a belief, an activity, a condition, a purpose, etc., the more clearly will the scholar learn to comprehend the forms of language; while mere words allow the deaf-mute who is still unskilled in abstract thought to see these forms only through a glass, darkly. Where the teacher does not come to the aid of the pupil with an explanation, the pupil receives from words nothing but casual, confused ideas, which cannot be corrected without great skill and tact on the part of the teacher, and then only by persistent effort and ever-repeated, wearisome questions. It is by no means to be presumed or expected of the pupil when phenomena and facts are presented to him, or he himself is made to utter

them, that he will immediately draw therefrom a correct conclusion as to the meaning or force of the words; on the contrary, it may be laid down as a general rule that the expressions of language must be analyzed for him in addition. What a saving of time it is, then, and how much more quickly the pupil arrives at the goal, when the exercise is explained to him by means of a skilful pantomimic representation! The sign-language renders excellent service, especially in the development of ideas, which it is often scarcely possible for the teacher to convey in words. Moreover, the pupil early and rapidly obtains through the sign-language all kinds of knowledge, for which words would compel him to wait long—very long. Inasmuch as *all* pupils are not endowed with such readiness in language as to grasp everything directly in and through words, these unfortunate children, if deprived of the sign-language, are exposed to the danger of having to leave school poor in general knowledge, lacking in notions, conceptions, and ideas, and, what is worse, of being compelled to remain very ignorant in a moral and religious point of view. The greatest facility in speech and language is not conclusive proof of the pupil's real comprehension, if he is not at the same time able to render an explanation in gestures.

For instance, there are the Bible histories, which cannot be presented to the young too early. Must we postpone them until the pupils acquire facility in language? To be sure, the attempt is made here and there to remedy this grave defect of the method to a certain extent, by presenting the most important historical points of religious instruction in short, simple sentences; but of what profit to the children are these barren words, single, disconnected events, and measured, forced forms of expression? Those living scenes of the history, which in themselves are so interesting and profitable to the unprejudiced minds of childhood, cannot be depicted or represented by such an unnatural and superficial treatment. Either let the pupil receive them from the teacher in the free form of his native language, or let him wait until he has acquired the ability to read in our

language. Any other method is injurious. Only by a vivid description of events, either in words or in gestures, can the pupil enter into the spirit of the history, and, as it were, live in it; otherwise, his knowledge will be limited to lifeless, barren facts. I wish my readers could have been present at a lecture in signs by the late Mr. Frost; he had the power of so transporting the children into the fields of history that they seemed actually to witness the events. I have seen one of his pupils, a little Jewish boy, who had been in the institution scarcely a year, relate in his own natural language the whole history of Moses, with expression, vivacity, grace, and dignity.

But let us not be misunderstood. When we say that we desire the cultivation of the sign-language, we do not mean that we wish it to be formed after the genius or model of spoken language, so as to render not merely the meaning but the very forms and equivalents of words; but only that it should be adapted to express the sense of the spoken thought readily and clearly. It is not to be asked of the sign-language, which is descriptive in its character, that it shall attain to the peculiar force of word-language, that is, its more ideal or verbal force, or that it shall give an insight into the proper combination of words or the construction of sentences; but, by discovering to the pupil the substance of the words, it contributes, though it may be only indirectly, to an understanding of them. If the sign-language succeeds in conveying to the pupil a clear idea of what the words contain, it will be easy for him to fill up the gaps in his comprehension through the words themselves.

If, then, the sign-language is a useful and important auxiliary in imparting instruction, no teacher of deaf-mutes can properly dispense with it; on the contrary, it is the sacred duty of our profession to acquire the requisite skill in the use of pantomime, though this acquisition may be no easy thing. Let the teacher remember that the instruction is for the benefit of the children—not of himself.

It is scarcely necessary to remind the reader that in the development of the sign-language it is not essential to have

signs for every word and its construction, but only so many signs as are needed to express the substance of the words. For instance, if I wish to say to my pupils, "The clouds hide the sun from us," I only need to describe the appearance of nature, without troubling myself about a sign for the word "hide;" for I may presume that if the pupil has comprehended the idea of the word he will express it by the proper word-sign. Of what use is it to construct methodical signs, or rather signs corresponding to words, when the word-signs themselves are equally at the pupil's command and answer the same purpose?

---

8. *What is to be thought of the objection of those who maintain that instead of allowing the sign-language to intervene we should attach the expression of the idea directly to the word?*

What, is it possible that we would not allow the deaf-mute to think, like the hearing child, directly in words? Can we be ignorant of how much greater results would be accomplished by words than by signs, and how much more rapidly and surely the pupil would be led to these results? Why, then, do we not choose the way that would lead most quickly and certainly to the goal? Why do we not prefer this way to one which is far more uneven, which is full of hills and mountains, swamps and morasses? Why do we choose to cultivate a field which in spite of all our labor and pains produces such slender fruits? Are we not guilty of folly in rejecting a course that brings good fortune and blessing, and promises gold and silver? Why, in short, do we not teach our pupils to speak, rather than to make signs?

Alas! we know very well that speech, not signs or gestures, is the nearest, most direct, and immediate way to speech, (writing and reading,) and therefore we lament the more that it is not in our power to satisfy this very just demand. We do not believe, and we never can believe, that this way, although the most natural for others, is also open to the deaf-mute. For him, if not wholly closed, it is at

least obstructed; he has not, like hearing persons, a natural capacity for speech, but must first be made capable of it. In order to make him in some degree capable of it, two entirely different methods are offered: we may either use constraint, or we may open the way to speech through gestures. But what is it to use constraint? It is nothing else than to do violence to nature; it is to enter with the pupil upon a course different from that which nature desires, and which she has expressly prescribed. Spoken language is proposed instead of the sign-language. But is it doing well—is it acting wisely—to employ a method different from that which nature has designed for this very purpose? Is it proper for education to engage in such a struggle against nature? Can education accomplish anything without the co-operation and assistance of nature? To educate, is, properly speaking, to assist nature to educate and develop; it is to enable her to reach the end which she has in view with regard to men. For the deaf-mute education is, it is true, a process of *healing;* but the healing can be performed with the aid of nature. Even if we could accomplish anything while acting in disregard of nature's laws, surely that would not be true culture; it would be false culture. Who would be wiser than the Creator? Who would forestall the plan of education which God of his good purpose has provided for the deaf-mute? What else can we expect of a false philosophy than the sacrifice of the well-being of the child entrusted to us? Would this education and culture of our own devising be sound? Would not the child's disposition, as well as his misguided intellect, receive a serious injury? Can that be a wise education which wholly denies the deaf-mute's nature—which completely ignores deaf-muteness in the deaf-mute? We are like the busy Martha; we give ourselves much care and trouble, and forget the one thing needful—a sound humanity, which we should strive for above all other things.

We consider it unworthy of us, as teachers and civilizers, ever to do violence to that nature in whose service we are enlisted. We take this ground the more firmly, since an-

other way is open to us. It is the peculiar lot of the deaf-mute that he cannot walk in the road which thousands about him travel, unless a peculiar staff is provided for him to lean upon. This staff, so indispensable to him in walking and moving, is his language of signs. What is speech? Speech is the formation of words. But the deaf-mute, since he does not hear, learns words by being spoken to, not with the voice, but by gestures. So it is through gestures that he must first be made capable of speech.

True, this way, being circuitous, is very long; true, it is rough, inconvenient, and difficult. But slow as it is, there is no more direct or better way; none which leads more surely to the desired end. The apparently short and rapid way, since it departs from nature, departs from its proper aim; it is the wrong way, and we must avoid it. Nothing remains for us but to take the longer course. We deem it better to provide for the immediate present want of the pupil than artificially to create a new want, which might with advantage to him have slumbered longer. How can any one be so hard-hearted and cruel as to demand of him that he shall stand, walk, and run upon his own feet while he is still partly crippled? Who would give an infant solid food and drink before it has yet learned to suck? Who would artificially create hunger and thirst in the child before they manifest themselves? Does any one really believe that nature can be guilty of negligence?

---

9. *What is to be thought of the opinion of those who maintain that the sign-language is a hindrance to the pupil in the development of spoken language?*

Even among professional teachers of the deaf and dumb there are, strange to say, some persons who fear that the sign-language, the instrument which is employed to open to the deaf-mute the sanctuary of language, will place a barrier to the further progress of the mind. For this reason they earnestly oppose its use.

But is this suspicious mistrust of the provisions of nature,

or rather of the gift of God, a delusion on our part, or does nature really make sport of us? Who believes nature capable of such an outrage upon the deaf-mute as to make his intellectual development dependent upon conditions which must eventually ruin it? Does she really play upon him such a cunningly-devised trick as this? No. The treachery of which they say that nature is guilty is nothing but the delusion of her accusers and opposers. Nature, being from God, is wholly good, benevolent, wise, and God-like, and contradicts herself just as little as God contradicts himself. Let us understand the hints of nature, and we shall admire her wisdom, or rather the wisdom of the Creator, and shall be more gentle and just, more considerate and indulgent, toward the children whom we teach.

What, then, does nature wish of the sign-language? She wishes it to break the path to the development of spoken language, and to assist in imparting it; nothing more. The sign-language claims to lay the foundation of word-language, not to perfect it. It aids in the creation of words, and leaves the complete development and incorporation of language to a more special instruction in language. It does not interfere with the essence of language, and exerts no further influence upon it than to call it into life and existence. Not the least beginning can be made with words without the assistance of gestures. Therefore it happens that many teachers who theoretically wish to know nothing at all of the sign-language recall it from its banishment upon the first effort to give instruction in language. Therefore, also, other teachers are compelled to confess that the sign-language cannot be wholly dispensed with, though they make it an unalterable rule that it should be dispensed with as much as possible. Thus the sign-language stands in good credit in all *schools*, though not in all *books*.

How can pantomime be injurious when used upon this simple, unpretending, and modest basis? How can the real logical principles of language, which it represents, be injurious to the formal principles of language? How can the logical thinking of deaf-mute children interfere with the

development of their language when they think just as correctly as other children? If, notwithstanding this, there is ground for the complaints made against the sign-language that it attacks word-language and engages it in a life and death struggle, it is because the minimum limit of the sign-language, determined by nature, has been presumptuously overstepped, and the domain of word-language has been encroached upon. There are, unfortunately, many teachers so weak in the sign-language that in attempting to use it they combine it with word-language in such a way as to speak in an affected, unnatural fashion of their own, instead of the free, unconstrained manner of the children. Of what use is it for the teacher to appear a puppet-player rather than a real actor? Let it not be supposed that if the teacher explains or interprets a Bible narrative, for instance, in the order and construction of word-language, or in any other distorted form, it will be understood by his pupil. No; the pupil understands nothing of it, or at most he gets only shadow-pictures, and the cloud prevents him from discovering the meaning of the words. If, on the other hand, the teacher expresses himself freely, in the manner of his pupil, not only does the picture of the narrative present itself clearly to his mind, but he also accomplishes more easily and understandingly the task of clothing it in words.

When the sign-language is so unworthily treated as to be made the mere tool of translation or the blind slave of spoken language, as is apt to be the case in schools where articulation flourishes, there is always danger that the instruction in language will degenerate into a mere dead mechanism. The slavish dependence of the sign-language upon the forms of spoken language cannot fail to be injurious. If, through a perversion of their use, the sign-language and word-language are presented to the pupil as identical ideas, the sign-language will draw the word-language after it, and will lead it astray into swamps and morasses. Thus it is often remarked that the written language of the deaf and dumb is less a free product of the mind than a mere imitation or echo of the sign-language.

In teaching language, signs must be used independently, not artificially. According to the manner in which the sign-language is used will the education of the pupils be more or less easy. If the teacher always aims steadily at the minimum of the sign-language, freer space will be left for the acquisition of word-language. If he refrains from creating signs for words and forms, and limits himself to giving in signs merely the idea, justice will be done to word-language, and the latter will perform its part with less constraint. But if the pupil clings to the sign-language, and during the first part of his course is continually falling into its monotonous forms, this is entirely in accordance with the nature of things; for he must learn to construct before the word can become the subject of reflection or of closer consideration.

But the teacher has it in his power to counteract the influence of the sign-language with spoken language, and to give the latter the preponderance where it is possible. If, then, the teacher does not succeed in naturalizing the pupil in spoken language, and the sign-language continues to predominate, he must conclude that he himself is to blame. The word will not assume the mastery until it has itself been mastered. If the sign-language obtains a permanent foothold here and there, instead of giving place to the word, it is the fault not only of the disadvantages of this language, but also of the bad method of teaching spoken language. Since the pupil is drawn directly to the sign-language by his own needs, it is certainly better for the teacher to leave it undisturbed, and devote his efforts to increasing the pupil's slight interest in words.

From what has been said it will be evident to everybody how false and untenable is the claim of the opponents of the sign-language, that if this language is once introduced into the course of instruction it will fix itself in the pupil's mind and obtain control over his thought forever, or, as they love to say, will grow into and with his thought. It is a pity that these opponents cannot distinguish the true from the false. It is true, and quite in accordance with the na-

ture of things, that the sign-language will not give up its place while the representative or successor which has been appointed is still in its minority, or unable to assume the role of thought. But it is false, and wholly false, to say that it will not surrender its domain when its own child, which has been brought up by itself with the utmost devotion and self-denial, has finally come to the years of age and discretion. There still dwells in the deaf-mute, undisputed by the sign-language, a special predilection for word-language, since this can better satisfy the higher interests of the mind; and if the pupil is only taught to know and esteem the intrinsic value of word-language aright, the broad domain of the latter, even in the presence of his own sign-language, will be as open to him as to any other child. What detriment has the intervention of the sign-language done to the results of the French method—results which, to say the least, are not at all inferior to those of the German schools?

There is, then, nothing objectionable in the principle of instruction in language by the method of signs. The sign-language is for deaf-mutes *an absolutely necessary bridge*, in order that they may be able to cross over to the land of spoken language; but let us not forget that it is *only* a bridge, and that the teacher must lead his pupils over it with prudence and caution.

---

10. *When, and to what extent, does the deaf-mute pupil think in words?*

It is a wholly mistaken and false, yet widely extended notion, that the pupil, so far as he can express his ideas in words, or read understandingly, invariably thinks in the same form, viz., in words, as is the case with persons who hear and speak. Against this notion, which doubtless originated with hearing persons, we must here, in the name of the whole deaf-mute world, enter a decided protest.

We willingly grant that foreigners who are beginning to speak a new language may think in the form of that language, for the forms are of the same kind as those in which

they have been accustomed to think, viz., words. With the deaf-mute the case is wholly different. He thinks of the language which he is now learning, not in the same kind of signs, viz., word-signs, but in gestures. He thinks in images, not in abstract forms. In order that he may be able to think in the abstract form of words, he must pass from his own language to word-language. Moreover, he must be able to express himself in word-language with the same readiness and ease that he does in his own language of signs. But how does he conceive of words according to the analogy of the sign-language? Place before him this sentence: "When it rains, the earth becomes wet; but when the sun shines upon it, the earth becomes dry again." According to the analogy of his vernacular he conceives of the language aphoristically, and gathers from it scarcely more than these words: "Rain, earth wet; sun shines, earth dry." Now judge whether the pupil can form a regular thought with these bare, disconnected words. The deaf-mute beginner in language conceives of words in a very fragmentary and incoherent manner, even though—and this is scarcely less than a miracle—he may be able to express himself in complete sentences. Words swim in his brain too confusedly and mistily for him to produce with them regular mental images, (conceptions, notions, thoughts.) To the deaf-mute words are at first an awkward, clumsy machine for thought, which he can learn to control only gradually and through long practice.

It is true that the deaf-mute, like the hearing child, must learn language through usage. But while, for the hearing child, words grow directly from their use, it is the peculiarity of the deaf-mute that he must collect a certain number of words and learn to understand the method of using them before he can fully comprehend them. A considerable time, therefore, must elapse before he can use words with the same readiness, freedom, and self-reliance as the hearing child.

Thought must always keep pace with language. It is no wonder that the hearing child speaks from the first, since

he can think in no other way than in words. If the deaf-mute is to speak (that is, form words) with the same readiness and ease as the hearing child, he must be able to think in the same form, viz., directly in words. Now, since the deaf-mute child does not think in an abstract form, but in his own way, viz., in the concrete form of the sign-language, it follows that he cannot use and employ words like the hearing child, but only in his own way.

The deaf-mute, however, may be made capable of receiving abstract thought, that is, thought in the form of spoken language, even before he has become capable of speech, (writing.) It depends chiefly upon the skill or readiness of the child—who hitherto has thought disconnectedly, that is, in single words—in grasping words in their full connection, their inward relation. Until the child reaches this point he has not the least knowledge of even the simplest sentences. While the hearing child learns to understand words directly in their combined form, this form becomes clear to the deaf-mute child only after he has learned to know and distinguish the various forms of their combination. One of the teacher's chief tasks is to bring one form of language after another before the mind of the pupil, and teach him rightly to understand and use a certain number of phrases, which exercise an important influence upon the construction of language. When the pupil is so naturalized in word-language as to have at his command words and phrases for the formation of thought, and is able to use words with the same freedom and independence as the hearing child, then, and not until then, does he begin to think in words; from that moment does the word become directly the vehicle of his thought.

To sum up, then, we may say that for the deaf-mute, abstract thought, or thought directly in words, depends upon his command of language, and does not—though the preconceived opinions of many teachers lead them to believe so—grow spontaneously from speech, as is the case with hearing children, or instinctively, as the song from the throat of a bird.

11. *What form must be made the unconditional basis of deaf-mute instruction?*

As the method of elementary instruction in general proceeds from the facts and phenomena of the child's nature, and develops his understanding in connection with these; as it naturally joins the thread of instruction in language to the language which the child already possesses, so the instruction of the deaf-mute properly proceeds from the pupil's own intellectual stand-point, and therefore from the sign-language, as the form in which his thought and ideas take shape and in which he is able to comprehend the intellectual. *Speak as you think* is a law of man's intellectual nature; according to which the deaf-mute child can learn to speak (read and write) only by means of gesticulation, this being the form in which he thinks. As the speech of the hearing child is dependent upon articulation, that of the deaf-mute is dependent upon pantomime. Through pantomime he becomes capable of thought; through pantomime, also, he is made capable of instruction. How can any man learn to speak without the assistance of his own language? Since the deaf-mute cannot, like the hearing child, rely upon spoken language, the only reliance left him is the sign-language. As to the hearing child the word is an idea-sign through articulation; to the deaf-mute it can become such through gesticulation. It is really the law of nature that the deaf-mute shall first learn to understand the word as a sign of the gesture-sign before it can become to him a direct sign of the idea which it represents. We invariably find that the deaf and dumb cannot articulate or spell without gesticulating in their minds.

The deaf-mute, then, can learn language by means of the sign-language, as the hearing person by means of articulation. Granted that the sign-language is and must remain a very poor ladder of instruction, since it but imperfectly fulfils the high mission of articulation; yet it is and must remain the ladder by which the deaf-mute can ascend into the regions of language.

From all this it follows that no more natural method of instructing the deaf and dumb can be devised than that which is based upon the language of pantomime.

This principle of instruction, long recognized and adopted by the French method, should not, must not, cannot be ignored by the German method; for the latter, after all its experiments, is not able to prove by facts that deaf-mute children can be taught to speak without abundant aid from the sign-language. Speech, if it is to be a thought, and not a mere play with words, must be built upon and introduced by gesture. What spoken language is for hearing persons the sign-language is for deaf-mutes. For them it *represents* spoken language in the exact sense of the word; its province is to solve the first problems of their elementary instruction in language. It is the heart, the centre, the focus, the alpha and omega of deaf-mute instruction; the teacher must either resort to this, or must bestow language upon his pupils by act of creation: there is no third course.

---

12. *What is the true fundamental and permanent form of instruction?*

Though we are agreed that the sign-language is the *basis* of instruction, it does not therefore follow that this must also be the *form* in which the pupil is to receive the knowledge to be imparted, or that it is the permanent and fundamental form of instruction. The simple task of the sign-language is to communicate ideas, not to fix them. The fixing of ideas, that is, thinking by means of symbols, is the exclusive province of the *word*. True, the deaf-mute can think by means of the sign-language, and can thus learn to recognize and know many things, but only in a very limited form, as is to be expected from the nature of the sign-language. What he knows through the sign-language he must now grasp and make his own *in the form of the word*. It is through the word that his material representation, his concrete thought, can be transformed into the purely intellectual. The word is the most distinctive, the most common,

the original representation of mankind, the most expressive and natural form of thought as such, the real and true knowledge of all things, the absolute intelligence of abstract notions and ideas.

Though the word is something wholly foreign to the deaf-mute, yet he also can fathom it, and make it subject to his mind. Though his ear is closed, so that he does not of himself feel the influence of the word, and consequently cannot be taught in the manner of hearing persons, he can, nevertheless, learn to understand the closer, deeper relation of the word with the thought. Though he thinks by means of the sign-language in images, this being the original form of his thinking faculty, yet there also dwells in him the capacity to conceive of word-signs as signs of ideas, and by means of these to fix his actual notions and ideas.

But only when he knows how to clothe his notions and ideas in words, or to think in the form of our language, are the intrinsic value of his thoughts and the intrinsic worth of his knowledge and ability determined.

Since, then, the word, not the gesture, is the garb in which the deaf-mute is to acquire his notions and ideas and knowledge of every kind, it must be laid down as a fundamental rule of the method of instruction that the pupil shall conceive of what he learns only in the strict form of the word; or, otherwise expressed, that the word, and not the sign-language, shall be the permanent form of instruction.

Here we find the French and German methods in perfect agreement. Though the French method may be guilty of carrying its fundamental principle too far and indulging in the use of the sign-language to excess, yet it insists, not less than the German method, upon the intellectual and rational conception of the word. For this purpose it has recourse to the finger-language, (dactylology,) where the German method employs articulation.

But how is the deaf-mute to learn to conceive of the word only in the form of the word? As the hearing child at first conceives of the word in its articulate form, so our pupil can at first conceive of it only in the form of the gesture-lan-

guage. The hearing child, with the growth of signs, (word-signs,) gradually gives up the concrete articulate form and begins to think in the abstract form of the word; so in the mind of the deaf-mute, as he becomes acquainted with the forms of language, the gesture falls back and the word comes to the front. The word makes its influence felt speedily and powerfully in the case of the hearing child, who has the advantage of continual practice in the use of language; with the deaf-mute it asserts its prerogative slowly and hesitatingly. But the double form in which the deaf-mute is compelled to think during the first stages of his course of instruction can no more prevent the abstract form from finally prevailing than the concrete form prevents it in the case of the hearing child. He can learn to estimate the intrinsic value of words as compared with the sign-language; if he is taught to use words rightly they will be able to maintain their ground, and even to gain the preponderance. The pupil must be allowed to employ this double form of thought until his method of thinking has grown into the purely intellectual form. It is not strange that the deaf-mute has less inclination than the hearing child to use words, since to him they are far more obscure. It is evident, too, that much greater special effort is required to enable him to conceive of the word in its abstract form. If the teacher observes the proper limits of the sign-language; if, when the intervention of pantomime is necessary, he contents himself with giving the simple explanation without specific signs, the pupil will be led to regard more closely the formal side of the word. In every explanation the teacher must let the word speak for itself. As the pupil's knowledge of language increases, speech or writing must be employed more than gesture. The word must receive full justice. In the use of speech or writing the teacher must insist that the pupil shall not express himself in loose accordance with the analogy of the sign-language, but as far as possible in the strict form of words. In reading, the pupil should give the sense of the words in the free manner of his vernacular, and not in the order of spoken

language. His reading should consist, as far as possible, of what does not require a preliminary explanation in signs, in order that he may learn to read silently by himself. He should, therefore, be given reading pieces, for which he has been prepared by previous instruction. The teacher must not be too ready with explanations, but must urge the pupil to find out the sense of the words for himself. To ascertain whether the pupil understands what he has read, he may be questioned upon it orally or in writing, or may be required to translate it freely into his vernacular. If he speaks only aphoristically, in his own language, it is a sure proof that he has not fully understood, and he may be helped with an explanation. When the teacher gives anything to be written out or expressed in sentences, let him confine himself to simply indicating the idea, and not dictate the order or form of the words; at most, let him write on the black-board the words which the pupil would not find out for himself. In giving a narrative history, or description, let him develop only the material or actual part, leaving the pupil to write out the whole in the strict form of words, with such readiness as he may possess in the use of language. So far as circumstances permit, the pupil should write from real life, from pictures, or from conversations previously held.

In general, the word should have the preference; teacher and pupil should speak or write, and the sign-language should be made auxiliary and subordinate. If ignorance of word-language renders the assistance of the sign-language indispensable in the lower classes, in the higher the word must be used with so much the greater strictness and with the more unyielding persistency.

---

13. *Should the word be received by the pupil in the form of articulation or of writing?*

While it is generally agreed that the word should constitute the permanent form of instruction, and that whatever ideas are to be imparted to the pupil should be fixed and assimilated only by means of the signs of our language,

viz., words or phrases, there is yet a marvellous difference of opinion among teachers of the deaf and dumb as to whether the word should be imparted to the pupil in the form of articulation or exclusively in that of writing. Here the French and German schools stand sharply opposed to each other, the former declaring that writing is a sufficient means of instruction; the latter maintaining that writing can by no means dispense with the aid of articulation.

Though both schools may be able to prove by the facts of actual experience that, notwithstanding the difference of their principles, they have each produced satisfactory results, yet the question whether the two methods are able to stand on equal terms before the tribunal of educational science is one that cannot be avoided.

We assert in the first place, in behalf of deaf-mute education as well as elementary education in general, the principle that the process should be in accordance with nature. For though the instruction of the deaf-mute, on account of the natural disadvantages under which he labors, requires the most complete resources of art, yet this art must always be in alliance with nature if the child is to be really educated, not merely drilled and trained. Let us beware of artificiality, into which the instruction of the deaf and dumb is the more likely to fall from the fact that it is essentially a method of art.

Now, do the French and German methods both follow the course of nature? Yes; the results which they obtain afford convincing proof that they do. But just here, where each method can point with equal justice to its own manner of instruction as natural, though neither will acknowledge this of the other, just here the strife and conflict must be hottest and most difficult to decide.

But the results or achievements of methods so different are not of themselves decisive as to their intrinsic excellence and value; the processes also by which these results have been reached deserve to be considered and examined from the stand-point of educational science, to see whether they are natural or unnatural. What, then, is meant by a natu-

ral process? It is one which not only offers no opposition to the laws of nature, but also allows her a full and free course. Now, which of the two methods can boast that it has acted in complete harmony, as well as in alliance with nature? Which method can say of itself that the pupil instructed in accordance with its plan has acquired his knowledge and power more from inward than outward necessity, more from his own impulse than from compulsion, and without opposition or struggle? One cannot refrain from asking whether there is not in one method or the other—even allowing that they both lead to the same result—something forced, strained, artificial, and, therefore, unnatural; something that may cause the unhappy pupil to use his strength in a manner contrary to nature. Two methods so different must be of different value; one must be true, the other false.

Now, which form of deaf-mute instruction is alone scientifically correct, articulation or writing?

We know, indeed, and everybody knows, that to the deaf-mute, as such, it is just as little natural to express his intellectual activity in the form of articulation as of writing; both are alike dead forms, to which art must first give life. But here we encounter the question, whether the pupil can be rendered capable of receiving the one form in just as natural a manner as the other. What is the course of the two methods in this respect? Both proceed from the correct principle that the pupil is to learn to know and value the alphabet, whether written or spoken, by the appearance of the word, the elements and constituents of which are letters and sounds. If the word means anything to the pupil, if it manifests itself to him as an idea-sign, its elements and constituents must also have some meaning for him.

Though the art of instruction may succeed in leading the deaf-mute to understand and appreciate the forms of language, whether written or spoken, as the vehicles of the ideas indicated thereby, yet we are met by the remarkable phenomenon that the pupil is still very far from thinking in written or spoken words. For him, words are not the immediate signs of ideas, but are dependent upon the media-

tion of gestures. The word cannot become the direct vehicle of his thought until it has become more closely combined with his thought. But how does this take place? It takes place only when the pupil has acquired the power to conceive of the word directly in its form; that is, abstractly. Teachers generally, with the exception of extravagant theorists, rely as little upon the power of articulation as of writing to lead the pupil to associate the word with the thought in his consciousness. This happy result is rather expected from the influence of the word, and in such degree as the pupil has become familiar with the forms of language in which thought is expressed. It is the special aim of the French as well as the German school to place the word as a means of expressing thought at the ready command of the deaf-mute, so that it shall perform the same office for him that it does for the hearing person.

But, it may be asked, can the power of the word be relied upon to render the deaf-mute capable of thinking in one form as well as the other—in the form of writing as well as articulation? Yes; in proportion as the pupil's need of words, which is kindled by his instruction in language, is greater or less, must the impulse to think in words, spoken or written, be stronger or weaker. This is the reason of the remarkable phenomenon that the two methods, in spite of foundation principles differing widely from each other, obtain results so nearly equal.

Since both methods agree in proceeding from the word, and endeavoring thereby to render the pupil capable of thinking in words, neither can be blamed from the standpoint of educational science; on the contrary, each can maintain in its own behalf that its principles are in accordance with nature. In this respect neither can claim superiority over the other.

But we have not yet done. Though we must admit that the deaf-mute, if he has been wisely and well instructed in language, may be impelled by inward necessity to think either in the form of articulation or of writing, yet we cannot escape the question whether the two forms afford equal satisfaction to the inward impulse of the pupil.

Let us consider this question more closely. What is the relation of the word, or language, with thought? This relation must be a double one, not only intellectual or spiritual, but also psychical. The word is the result of the reciprocal relation between the intellectual and psychological, or the physical and psychical organism of the human soul, and the assimilation of the word is chiefly dependent upon the sense of hearing, by means of which the word makes itself known to the soul as the established sign of objects or outward phenomena. The deaf-mute, who cannot hear, is therefore limited to the merely intellectual comprehension of the word, and this may be the reason, and the only one, why words do not readily become the direct vehicles of his thought. For him, if he is to become conscious of the pyschical relation of the word, not indeed in the manner of hearing persons, yet in his own manner, the only way that remains is to substitute some other sense for that of hearing. Indeed, it is a wonderful provision of nature that in the absence of one organ of sensation another is the more intensely developed, and becomes capable to a certain degree of producing the sensations, and with them the representations, which properly belong to the sense that is lacking. Think of the blind, how they are able to represent to themselves visible phenomena merely through the power of touch, and of the deaf and dumb, who, by means of the same sense, distinguish, though very imperfectly, the vibrations of sound. Inasmuch as the deaf-mute lacks the sense of speech, viz., hearing, why should not nature come to his aid through the intervention of some other sense?

Now, is it not through the sense of touch that nature supplies the deaf-mute's lack of hearing? When he speaks aloud he can perceive the vibrations produced in his neck, throat, breast, head, etc., and so can feel to a certain extent that the word has some signification. By practice, the sense of touch can be so intensely developed that in the spoken word the object designated thereby will be reflected in his mind, though but obscurely and unconsciously. For touch is the central sense, in which all the experiences of the soul are united and concentrated as in a focus; it enables the

deaf-mute to hear, as it were, in the word, what sort of a condition, property, form of activity or emotion it expresses; whether it indicates something strong or weak, gentle, mild, friendly, shining, soft, smooth, rough, merry or sad, gloomy or cheerful, bitter, sharp, blunt, extraordinary, unusual, surprising, etc. On this subject the author of "The Deaf-Mute in an Uncultivated State,"* himself a deaf-mute, says:

"I was able in my early youth to guess, though but obscurely and remotely, the meaning of many words, merely through the vibrations which speech produced within me. I could thus, if I mistake not, distinguish such words as 'sorrow,' 'love,' 'pleasure,' 'grief,' 'blunt,' 'high,' 'deep,' 'soft,' 'hard,' 'warm,' 'cold,' 'pure,' 'white,' 'black,' 'clear,' 'obscure,' 'dead,' etc. Moreover, I noticed that as my hearing was gradually lost, my inward hearing, viz., touch, became more and more acute, and was almost developed into a sort of outward hearing. This was the case to such a degree that when I read inspired writers I was often completely carried away by them. In reading the epistles, gospels, and prophecies, it happened not seldom that I was profoundly agitated: it seemed to me that I actually heard the holy men themselves speaking. The word of God sounds to me peculiar, majestic, and sublime: it has for me a charm of convincing power such as no other word possesses. Even now I read the writings of St. Paul with the greatest pleasure on account of his forcible style. Foreign languages that I studied made a peculiar impression upon me: I would almost wager that I could discover from them the characteristics of the people who spoke them. The Danish language, as something tender, affecting the mind and heart, discloses to me the cordiality, good nature, sincerity, and honesty, but also the dejection and melancholy of the nation. The French language, surprising, persuading, and misleading the understanding, betrays to me the cheerful but fickle disposition of the French people. Latin is to me the dryest kind of food that I know of; it is a dish without salt or vinegar."

Another deaf-mute, who was such from birth, Charles William Teuscher, now deceased, formerly a pupil, and afterwards a teacher in the Leipsic Institution, writes as follows:†

"I confess that articulation is most thoroughly incorporated in my thought. I am able to think only by speaking inwardly, for there exists within me a word-sense, or an inward sense of

* "Der Taubstumme im uncultivirten Zustande," Bremen, 1826.

† In "Blicke auf die Taubstummenbildung," by M. C. G. Reich, Leipsic, 1828.

hearing; I only lack the capacity to receive words and modulated tones, like hearing persons, from without. But I perceive very distinctly within me the sounds which I myself produce in speaking aloud, and they are present in my mind even when I think in silence. I believe that in the hearty 'aye! aye!' there must be an expression of joy amounting to rapture, and the sound is something that elevates the breast. In 'alas!' on the contrary, the soul feels itself cast down. In the words 'lofty,' 'majestic,' 'Arise, my soul!' 'Praise God!' etc., I seem to raise my voice; but in 'How small is man!' to lower it. In the words 'Oh, what joy!' where the heart is generously expanded and cheered, I believe that the sound is clearer and higher; but in 'Oh, what grief!' where the soul feels cast down, that it is more sad. I prefer to hear the word 'home' rather than 'birth-place.' 'Fatherland' sounds better to me than 'Saxony,' or 'Prussia.' With the word 'home' the soul associates a certain sweet melancholy, produced by the thought of its transitoriness. I would rather say 'father' and 'mother' than 'parents.' So the feeling of the heart invests words with a certain elevation and depth."

Now, though touch develops a consciousness specifically different from that of hearing, though this consciousness is rather analogous than real and absolute, yet it must be remembered that speech may be produced by any consciousness under provision of which an association can be established between thought and speech. Therefore nature seems to have made thought in and with words, even for the congenital deaf-mute, dependent upon the mediation of spoken language; one might almost say that speech is just as natural for the deaf-mute as for the hearing person. Moreover, if on various occasions, especially when his feelings are much excited, the deaf-mute utters rude, inarticulate sounds, it should be concluded that he is none the less disposed by nature to express his thoughts also, which in their crudeness are closely allied to feelings, through more regular and articulate sounds.

Though speech chiefly results from hearing, yet it must be regarded as a form of expression corresponding to the psycho-physical organism of the deaf-mute. Though it may not actually produce thought in words, it certainly prepares the way for it.

On the other hand, what has writing or the manual alphabet to do with the word? Absolutely nothing. The manual alphabet, inasmuch as it produces no emotion in the

soul, is, and must continue, a lifeless thing, which it is contrary to nature for the pupil to employ. And how can written words, which in themselves express nothing at all, in which the sight discovers nothing pictorial or objective—how can these represent the characteristics of objects or definite ideas? As signs of ideas, words, if they are to be not merely conceived of, but actually incorporated into the thought, must correspond to their double relation with the intellectual and psychical organism of the soul; if they do not, they are, and must continue, wholly worthless as guides of thought. Has the written word any image whatever for the sense of sight? The deaf-mute would receive more help from hieroglyphics than from our alphabet-writing.

But though we admit that deaf-mutes may be brought by means of the finger-alphabet to think in the form of writing, yet in this case it is necessity that breaks the ice for them; finger-thinking must still be regarded as an unnatural process in comparison with speech-thinking. And how many pupils are there who really attain to this wonderful result? They certainly form a minority. The great majority are frightened away from it by the enormous mountains of difficulties and hindrances, or, perhaps, by the repugnance of their own healthy natures. Now, what value have knowledge and power for the unhappy children who are compelled to renounce abstract thought, or thought in words? How difficult, how wonderfully difficult must the acquisition of knowledge be without the power of abstract thought! And will not the language thus superficially acquired, and not incorporated into the thought, be effaced with the lapse of time? But granting that deaf-mutes would sooner or later become able to meditate with the fingers, we can properly claim that speaking deaf-mutes would have the advantage over them, for vocal language corresponds to thought in words better, more naturally, and more fitly than finger-language.

If the deaf-mute does not think in the form of spoken language, what other form remains? Only that of the sign-language. But of what use to the pupil is a language steeped

and dyed in the sign-language? With such a limited form of thought as this, can he penetrate into the depths of language and the sciences? Never!

Writing, then, if it is not to hinder or endanger the aim of instruction, cannot dispense with the assistance of articulation; and we must declare that the attempt to teach language to children solely by means of writing and pantomime is *a defective, unnatural, and unscientific process of instruction.*

What reason is there why articulation should be denied a share in the instruction of the deaf and dumb? Let it not be objected that deaf-mutes generally fail to speak agreeably and intelligibly. The benefit conferred upon the deaf-mute by speech is purely intellectual, and consists in the fact that by means of it he comes into possession of the noblest property of the human race, viz., language; in view of this great intellectual advantage we need be little troubled if the deaf-mute does not at the same time attain to an absolute command of the organs of speech. On the other hand, it is evident that the deaf and dumb can carry on intercourse with the world in general more readily by means of articulation and lip-reading than by writing with chalk, pencil, etc. Or is some compassionate, philanthropic heart alarmed at the insufferable contrivances used by the teacher to elicit articulate sounds from the pupil's fettered organs of speech? We also lament that pupils and teachers are obliged to use such means, but this is a matter in which we must choose the least of two evils. What do you say in the case of a child at the point of death, who may be saved by a surgical operation? Do you choose his life or his death? Well, in the case of the unfortunate deaf-mute, do you choose his restoration to sound intellectual health, or his intellectual and moral destruction? Moreover, what advantage over articulating deaf-mutes have those whom you teach to speak and think with the fingers? Is not this wearisome finger-speaking and thinking also a burden and torture for the poor creatures? Does not this thought alarm you?

Or do you wish to weigh the results of the articulation method before you can decide to accept it? But why do

you inquire for results, after it has been found that the principles of the method are scientifically reasonable and correct? Is the method to be blamed, though a hundred unfavorable circumstances occur to retard or prevent its success? Is the method to be blamed, if some of those who practise it are unequal to their great undertaking, or incapable of the sacrifice which it demands?

---

14. *In what relation does articulation stand to writing and the course of instruction in general?*

We have hitherto recognized it as a fundamental principle that the deaf-mute pupil should fix all his conceptions and ideas by means of language-signs, (words,) and not by means of gesture-signs. But the first act of language-signing is *speech*, and not writing. As the deaf-mute, from the nature of the case, cannot speak without seeing and portraying the letters, or reading, and thus learns to read, write, and speak all at the same time, so here, as always, where reading and writing are aimed at, speech is the key-note, centre, and focus of the course of instruction.

Articulation is the means by which speech first becomes associated with thought, and by which, therefore, writing first obtains its real significance. The pupil must be made to feel through speech that words express thoughts, before he can examine them more closely through writing. Though the acquaintance with words introduced through speech may be the most imperfect in the world, yet it is through speech that the first acquaintance with words must be introduced. When by means of articulation the pupil has once reached the point where, of himself, he becomes conscious of words as containing thoughts, writing takes more hold of the thought, and becomes a conscious, rational act. If the necessary connection between thought and speech—that is, the actual knowledge of words—is lacking, the development of thought takes the direction of the sign-language, and its expression in writing inevitably partakes of all the faults of this language.

Words must be elicited from the pupil through speech,

before they are written. Speech has the priority in point of time, and must always precede writing. First, words; then examination of them.

But though it is natural for the deaf-mute to learn speech before writing, and for writing to be wholly based upon speech, we must, nevertheless, guard against the error of supposing that the deaf-mute, like the hearing person, can learn to speak, write, and read, merely by means of conversation. The hearing child, since he thinks directly in words, is easily able to understand speech. Not so the deaf child, who thinks in pantomime. For him it is a matter of incomparably greater difficulty to understand what the teacher says to him or he himself utters. In speech, he can, at most, feel, not hear, the words, and he receives from them a partial, incomplete, and incorrect idea. The speech taught him is of less importance in itself than in solving for him the problem of language. It should, therefore, be imparted methodically, and in accordance with the law by which the capacity for language is developed. What speech teaches the hearing child in the confusion and chaos of words that are spoken in his hearing must be presented to the deaf-mute in a regular series of ideas, which shall produce, explain, complete, and support one another. The speech of the deaf-mute pupil, in brief, assumes the character of instruction in language.

Speech stands in an inseverable connection with *writing*, which forms the chief part of the course of instruction in language. Speech permits the deaf-mute to express only what he represents to himself at the moment of utterance, without paying the least regard to the manner of representation, which lies at the foundation of expression. When he is made to speak, he reproduces only such words as the moment suggests; but when he is made to write he directs his attention more to the forms of expression and weighs them more carefully. In reading from the lips he catches the words superficially and imperfectly, but in reading books he pays regard to the connection and collocation of the words in order to be able to understand what he reads. While, then, the hearing child comprehends materially and formally at

the same time, since he thinks only in words, in the case of the deaf-mute the formal conception is reserved for writing. The hearing child can arrive at the expression of thought through speech alone; the deaf-mute is dependent upon writing.

It is only when the material and formal sides of speech, or speech and writing, are not separated, that the word combines with the thought, and the deaf-mute can be made capable of thinking in speech when he reads or writes.

But the chief task of the course of instruction is, and must always be, the special formal development of the pupil's notions of language, as it is upon this that the influence of speech depends. Speech combines more or less easily with thought in proportion to the pupil's knowledge of the forms of language. In a school for the deaf and dumb, therefore, much more attention is given to writing and reading than in an ordinary school.

The relation of articulation to writing is this: writing must be chiefly based upon speech, and not the reverse; its task is only to complete what speech has already begun. As the pupil's speech, however, has not within itself the power of developing language directly, but must derive this power from writing, evidently it must stand in a close organic relation with the latter, and must anticipate more or less its form of development.

---

15. *What, finally, is the true, natural, and successful method of teaching the deaf and dumb, or in what does the real essence of the German method consist?*

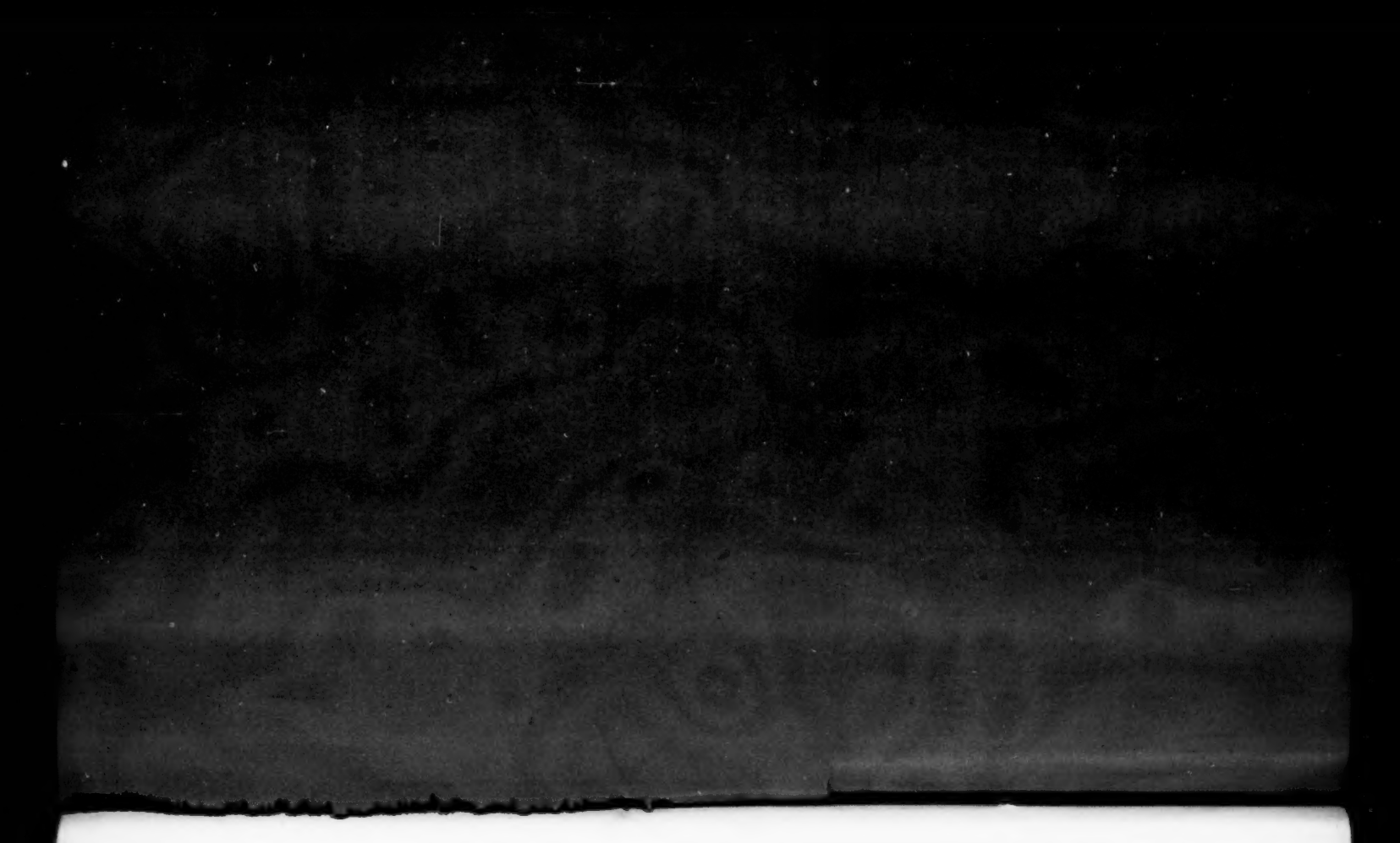
One of the most important, but also most difficult, tasks of deaf-mute instruction is undeniably that of preparing the children to think, or develop and express their thoughts, in the form of our language; for only when this point is reached are they ripe for abstract ideas and the conception of abstract truths; only then is the fountain of all knowledge accessible to them, and the great book of life, the Bible, opened. But deaf-mute instruction, like that of mankind in general, can attain to this grand result only in the

service of nature; only when, instead of contenting itself with abstract theories, it holds fast to the established realities and undeniable phenomena of the human nature of the deaf and dumb, and attempts less to explain the forms of their intellectual development according to a preconceived system than to follow the course prescribed by nature.

Since the secret of the unfolding and development of the intellectual life of the deaf and dumb is found in the *sign-language*, this constitutes the elementary principle of instruction—the source from which the first attempts at education must proceed; the foundation upon which the temple of knowledge and language must be built. Through the mediation of the sign-language—for what other way is there?—the deaf-mute gains acquaintance with words, and in proportion to the readiness acquired in the use of language the word becomes more or less the prevailing form of thought. But the word combines with the thought easily or with difficulty, speedily or tardily, according as it is grasped in the form of articulation or of writing. The deaf-mute becomes conscious of spoken words as an expression of thought sooner and more readily than of written words; hence the word must be based upon *articulation*, and not upon writing. But though articulation constitutes the basis of the pupil's comprehension of language, it does not follow that it must be the sole and exclusive guide of the course of instruction, for it leaves many gaps which can be filled only by the co-operation and mediation of *writing*. Speech and writing, then, must go hand in hand.

While articulation remains the chief factor of the course of instruction, it must avail itself of all the power of development which belongs to writing.

The real essence of deaf-mute instruction, therefore, consists in this: that articulation constitutes the fundamental and permanent form of the whole course, while it is supported on the one hand by the sign-language, in which it has its source and root as a reality of the pupil's intellectual activity, and on the other by writing, with which it unites and combines as a fundamental condition of the comprehension of language.



CONTENTS.

PAGE

THE COMBINED METHOD OF INSTRUCTION FOR THE DEAF AND DUMB.....*By O. F. Kruse.* 197

Preface..... 198

Introduction..... 200

1. What are the forms or realities which distinguish the French and German methods of instruction?..... 203
2. What are the principles of the French and German methods, respectively?..... 208
3. Is articulation really adapted to take the place of the sign-language in the instruction of the deaf and dumb?..... 213
4. What means have we within our reach that for the deaf and dumb shall perform the same office, in some degree, that spoken language does for hearing children?..... 219
5. Has the sign-language only the limited value of articulation, or does its influence, in respect to the acquisition of language, extend still farther?..... 221
6. Do all the advocates or adherents of the German method really believe that articulation affords a means of instruction so infallible as to make the sign-language wholly superfluous?..... 223
7. Does the sign-language, as such, deserve to be cultivated or not?..... 228
8. What is to be thought of the objection of those who maintain that instead of allowing the sign-language to intervene we should attach the expression of the idea directly to the word?..... 231
9. What is to be thought of the opinion of those who maintain that the sign-language is a hindrance to the pupil in the development of spoken language?..... 233
10. When, and to what extent, does the deaf-mute pupil think in words?..... 237
11. What form must be made the unconditional basis of deaf-mute instruction?..... 240
12. What is the true fundamental and permanent form of instruction?..... 241
13. Should the word be received by the pupil in the form of articulation or of writing?..... 244
14. In what relation does articulation stand to writing and the course of instruction in general?..... 253
15. What, finally, is the true, natural, and successful method of teaching the deaf and dumb, or in what does the real essence of the German method consist?..... 255